

Ladder Grip

Cross Reference to related Applications (none)

Statement Regarding Fed Sponsored R & D (none)

Background of the Invention

A ladder structure to be used on recreational vehicles such as campers or RV's to gain access to the roof of such vehicles. The ladders are normally permanently installed and are normally located at a rear wall of the vehicle. There are not known any implements with regard to safety of a person climbing the ladder, especially when reaching the top of the ladder, To aid the person in stepping on top of the roof with regard to safety.

Brief Description of the Drawings

Fig. 1 is a perspective view of the ladder including the safety grip;

Fig. 2 is a back view of the ladder including the manner of installing the safety grip.

Detailed Description of the Invention

Fig. 1 illustrates the known system of installing a ladder on top of an RV or a camper. The roof is indicated at 1. This ladder system, of course, could also be installed on any other upstanding structure having a flat roof such as a garage standing alone. The ladder is indicated at 2 and is normally fastened to the roof by a fastening system shown at 3. The ladder is also normally installed in such a manner that at least two railings follow the roof surface to some extent to allow for an extra step onto the roof for a person reaching the top of the roof. The above description is well known in the prior art.

At this point, when the person reaches the top of the roof, there is not known any safety feature to stabilize the person. To this end there is installed a safety hand grip 4 which in Fig. 1 is shown as upstanding.

Fig. 2 shows the details of the hand grip and an explanation of its operation. The hand grip 4 is installed in a telescoping sleeve 5 so that different heights of the hand grip can be obtained. The hand grip 4 is constructed in a U-shape form so that each leg 6 of the U-shape can be fastened to each of the ladder rails. Once a proper height of the U-shaped hand grip has been established, a clamping screw 8 will fasten each leg of U-shape in a respective telescoping sleeve by way of the clamping screw 8. The U-shaped frame or hand grip 4 is not rigidly mounted to the top of the ladder but can be adjusted to different positions. This is accomplished by way of a friction fit. There is a clamping connection 9 attached to the ladder and a clamping screw 7 passes through the clamping connection and the U-shaped frame. By tightening the screw 7 more or less to a certain force, the U-shaped frame 4 can be moved to and held in certain positions. When the ladder is not in use, the U-shaped frame should be moved to a complete down position. When not in use and the vehicle is traveling, it is desirable to have the frame 4 in a down position to remove the frame from any wind resistance and for aesthetic reasons. Being clamped in any position the U-shaped frame 4 cannot rattle as the vehicle moves. When a person climbs up the ladder, the person immediately can reach the U-shaped frame 4 and slowly can move the frame against the friction of the friction connection 9 to thereby immediately can take advantage of the safety feature as the person rises to the top of roof.

What I claim is: